

PROJECT REVIEW REPORT

Project ID	2603
Project Name	<i>Composting of organic waste project in Guangxi</i>
Program(s)	VCS
Project Proponent	<i>Guangxi Liyuanbao Science and Technology Co., Ltd.</i>
Methodology	<i>ACM0022: Alternative waste treatment process, version 03.0</i>
Sectoral Scope(s)	13
Validation/Verification Body (VVB)	<i>LGAI Technological Center, S.A. (Applus+ Certification)</i>
Assessment Criteria	<i>VCS Standard, v4.1</i>
Date of First Issue	<i>06 May 2022</i>
Date of Final Issue	<i>08 July 2022</i>

Summary:

An accuracy review of the *Composting of organic waste project in Guangxi* registration review approval request has been conducted by Verra in accordance with Section 4.3 of the *Registration and Issuance Process*.

The accuracy review has raised 07 assessment findings and 01 minor finding(s), detailed below. The VVB, in coordination with the project proponent, is hereby required to provide a response to the assessment findings presented in Section 1. The 08 assessment findings must be addressed to the satisfaction of Verra. The VVB need not address the minor findings during this review. Please note, however, that where Verra finds consistent minor findings by the VVB in future reviews, minor findings shall be escalated to assessment findings.

This project review report will be made publicly available. Confidential information may be provided as separate attachments.

1. ASSESSMENT FINDINGS

Finding 1

In line with §3.4.3 of the VCS Program Standard v4.1, the project proponent shall use the VCS Monitoring Report Template or an approved combined monitoring report template available on the Verra website, as appropriate, and adhere to all instructional text within the template.

In completing Section 1.1 & Section 1.13, the PD states that ‘In absence of the project, the organic wastes would have been dumped in the landfill sites’. It is not clear the source of the waste is in Municipal solid waste (MSW) or solid waste disposal sites (SWDS) such as landfill, or waste is coming directly from the source, e.g households, restaurants, farms. The template requires the PD to include ‘A brief description of the scenario existing prior to the implementation of the project’. Paragraph 3 of the applied methodology ACM0022 version 3.0 requires treatment of only ‘fresh waste’. The PD shall include the source of this fresh waste.

The VVB shall describe the steps it took to assess the situation prior to project initiation

PP Response:

The project uses waste biomass, manure, food wastes for composting. These materials are bought directly from households, farms or food companies. In absence of the project, these organic wastes would have been dumped in the solid waste disposal site (SWDS).

VVB Response:

The assessment team confirmed the source of the fresh waste includes waste biomass, manure and food wastes sourced from households, farms or food companies; without the project, these organic wastes would have been dumped in the solid waste disposal site (SWDS). All such information has been confirmed by checking the FSR compiled by third party and approved by the government also site visit interview with project owner.

Verra Response:

The source of the fresh waste is now confirmed and included in the VCS PD and the VR, in line with the methodology
The finding is closed

Finding 2

In line with §3.4.3 of the VCS Program Standard v4.1, the project proponent shall use the VCS Monitoring Report Template or an approved combined monitoring report template available on the Verra website, as appropriate, and adhere to all instructional text within the template.

In completing Section 1.1, 1.10, 4.1, 4.2, 4.3, & 4.4, the PP has considered emission reductions for the project crediting life of 21 years. The PP is required to only include the annual average and total emission reductions for the first crediting period only and not the project lifetime. The baseline parameters at renewal of the second and third crediting periods will be re-assessed and therefore the estimated values are incorrect

The VVB shall revise all relevant sections, of the validation report, starting with the summary section, Section 1.4, Section 3.1, and so on.

PP Response:

The emission reductions for the first crediting period (7years) are added in section Section 1.1, 1.10, 4.1, 4.2, 4.3, & 4.4 of PD. While the total emission reductions during the 21 years are deleted.

VVB Response:

The emission reductions have been revised in the updated PD and confirmed to be correct. The same has been revised in the updated FVR.

VERRA Response:

Revisions have been carried out in both the VCS PD and the VCS Validation Report
The finding is closed

Finding 3

In line with §3.4.3 of the VCS Program Standard v4.1, the project proponent shall use the VCS Monitoring Report Template or an approved combined monitoring report template available on the Verra website, as appropriate, and adhere to all instructional text within the template.

In Section 1.7, the PD explains that instance 1 was constructed and is operated by Guangxi Woze Biology Science and Technology Co., Ltd and Instance 2 was constructed and is operated by Guangxi Tiandong Liyuanbao Science and Technology Co., Ltd and that Guangxi Liyuanbao Science and Technology Co., Ltd. owns both entities and is the project owner. The PP is required to demonstrate that they have the legal right to control and operate project in line with the requirements of Section 3.6 of the VCS Program Standard v4.1. The PP shall also demonstrate with objective evidence, its relationship with the two implementing entities

The VVB shall update Section 3.1, accordingly

PP Response:

Guangxi Liyuanbao Science and Technology Co., Ltd. invests Guangxi Woze Biology Science and Technology Co., Ltd as well as Guangxi Tiandong Liyuanbao Science and Technology Co., Ltd. It holds the legal rights for the two companies. This could be demonstrated by National Enterprise Credit Publicity System (www.gsxt.gov.cn).

VVB Response:

By checking information on the National Enterprise Credit Publicity System (www.gsxt.gov.cn), it is confirmed that Guangxi Liyuanbao Science and Technology Co., Ltd. is the shareholder of Guangxi Woze Biology Science and Technology Co., Ltd as well as Guangxi Tiandong Liyuanbao Science and Technology Co., Ltd. Therefore, it is able to confirm Guangxi Liyuanbao Science and Technology Co., Ltd. hold the legal right to control and operate project.

The same has been included in the updated FVR.

VERRA Response:

Legal rights and ownership is sufficiently clarified and further information is provided in section 3.1 of the Validation Report.
The finding is closed

Finding 4

In line with §3.4.3 of the VCS Program Standard v4.1, the project proponent shall use the VCS Monitoring Report Template or an approved combined monitoring report template available on the Verra website, as appropriate, and adhere to all instructional text within the template.

In completing Section 3.2,

1. The first applicability condition does not include the source of the organic waste.
2. Table 6: The PP shall clarify the statement ‘the baseline is electricity would have been from SCPG, the proposed project electricity consumption is also from SCPG. This is described in section 3.4 of this PDD.’ For a greenfield composting project. PP shall update the applicability conditions in Table 6 and table 8 as it does not reflect the project activity
3. Table 8: The PP shall clarify the statement ‘This project results in savings of electricity that would have been provided by the grid’ For a greenfield composting project.
PP shall update the applicability conditions in Table 6 and table 8 as it does not reflect the project activity

The VVB shall revise the relevant section of its report (Section 3.3.2)

PP Response:

1. The source of organic waste is added in PD
2. Table 6 and 8 are revised
3. The statement in Table 8 is revised.

VVB Response:

1. The source of organic waste has been updated in the updated PD and confirmed to be correct.
2. Correction has been made in the updated PD.
3. Correction has been made in the updated PD.

The assessment team has confirmed the correctness of revision and the same has been made in the updated FVR.

VERRA Response:

1. Source of organic waste now included
2. The table has been revised to indicate that the tool is used to estimate electricity consumption from the SCPG grid, and that the project does not result in savings of electricity
3. The project does not generate or result in electricity savings. This is a composting project and therefore revised accordingly

The finding is closed

Finding 5

In line with §3.4.3 of the VCS Program Standard v4.1, the project proponent shall use the VCS Monitoring Report Template or an approved combined monitoring report template available on the Verra website, as appropriate, and adhere to all instructional text within the template.

In completing Section 3.3: -

1. The PP states that ‘this project does generate heat. Therefore, this item is excluded’, and marks baseline CO₂ as ‘yes’. The VVB shall check and also revise the relevant section of its report.
2. The PP states that ‘this project does generate heat. Therefore, this item is excluded’, and marks baseline CO₂ as ‘yes’. The VVB shall revise the relevant section of its report.
3. The PP states that ‘this project does generate heat. Therefore, this item is excluded’, and still marks baseline CH₄ as ‘no’.
4. The PP states that ‘this project does generate heat. Therefore, this item is excluded’, and still marks baseline N₂O as ‘no’.

The PP is requested to update the information in project boundary in the table in Section 3.3 related to the emissions sources from heat generation, onsite electricity use, emissions from waste to reflect the correct information

The VVB shall revise the relevant section of its report (3.3.3).

PP Response:

It is a typo, which is revised in the updated PD.

VVB Response:

Correction has been made in the updated PD and FVR.

VERRA Response:

1. The typo has been corrected and the VVB report is also consistent
 2. The typo has been corrected and the VVB report is also consistent
 3. The typo has been corrected and the VVB report is also consistent
 4. The typo has been corrected and the VVB report is also consistent
- The finding is closed

Finding 6

In line with §3.4.3 of the VCS Program Standard v4.1, the project proponent shall use the VCS PD or an approved combined PD template available on the Verra website, as appropriate, and adhere to all instructional text within the template.

In completing Section 4.1 and 4.2 of the VCS PD, the PP should note that the tables are required to reflect estimations based on the first 7-year crediting period and the emission reductions shall consider the start dates of each instance - Tables 15, 16, 18, 20, 23, 25 & 27.

The PD shall be revised to correct the start date of Instance 2, and the calculations adjusted in line with the assigned start date of 15/01/2020 in Section 1.8 of the PD.

The VVB is required to ensure all sections re corrected and to revise its own report.

PP Response:

The start date of this project is 06/01/2020, the end date of the 1st crediting period is 05/01/2027. The data in table 15,16,18,20,23,25,27 are revised accordingly.

VVB Response:

Correction has been made in the updated PD and FVR.

VERRA Response:

The date for second instance in Tables 15,16,18,20,23,25,27 has not been corrected. The calculations are to be adjusted according to the start date of 15/01/2020 for this instance 2. The VVB is asked to perform its audit functions appropriately to ensure that dates and values are consistently reported in the PD and the VVB Validation report.

The VVB shall ensure that the correct ER spreadsheet is submitted to Verra for review

The finding remains open

PP Response:

In previous version of PD, the start date for instance 2 in the tables was the project start date. This is a misunderstanding on Verra's review comment. Therefore, the start date for instance 2 in table 15,16,18,20,23,25,27 of previous PD is not revised.

Now it is clear about the Verra's comment. The start date for instance 2 in table 15,16,18,20,23,25,27 of PD is revised from 06/01/2020 to 15/01/2020

In previous version of PD, the baseline emission of instance 2 for the year 2020 is calculated according to the percentage of actual operation days in total days of 2020 (365days). However, the total days in 2020 should be 366 days. Therefore, the BE in 2020 is revised in updated PD and ER sheet.

The project emission of instance 2 for the year 2020 is not based on the actual operation days, but is based on the whole year. This is revised as per the percentage of operation days in the updated PD and ER calculation sheet. Therefore, the PE and ER are revised accordingly in table 15,16,18,20,23,25,27 of the updated PD.

The ER sheets are also attached for your reference.

VVB Response:

Correction has been made in the updated PD and FVR.

VERRA Response:

The PP has corrected the PD. However, the following is observed

1. The PE_{N_2O} value in Table 27 for 2020 is inconsistent with the same value in Table 29 and the spreadsheet. 7,950 vs 7,646.
2. The PE_{CH_4} value in Table 25 for 2020 is inconsistent with the same value in Table 29 and the spreadsheet. 8,400 vs 8,079.
3. The PE_{CH_4} value in Table 24 for 2020 is inconsistent with the same value in Table 28 and the spreadsheet. 22,400 vs 22,094.
4. The PE_{N_2O} value in Table 26 for 2020 is inconsistent with the same value in Table 28 and the spreadsheet. 21,200 vs 20,910.
5. The PE_{EC} value in Table 23 for 2020 is inconsistent with the same value in Table 29 and the spreadsheet. 734 vs 763.
6. The PE_{EC} value in Table 22 for 2020 is inconsistent with the same value in Table 28 and the spreadsheet. 2,035 vs 2,007.
7. Table 21: The final BE_y value is given as 948,341 against the spreadsheet value of 948,342. Consistency is required.

The VVB is required to correct the ER table in Section 3.1 with the correct 2020 values (257,038 tCO₂e), consistent with the revised spreadsheet (258,332 tCO₂e)

Consistency in reporting is required

The finding remains open

VVB/PP Response:

The difference detected by VERRA is due to the reason as below:

1. It is found that there are two same table numbers (table 15) in previous version of PD. Therefore, the table numbers are revised in the updated PD. Therefore, all the table numbers are changed in following answers.
The $PE_{N_2O,y}$ value in table 28 is the value for the whole year of 2020 for instance 2 (add footnote in table 27). While 7,646 in table 30 is the emissions for period of 15/01/2020-31/12/2020 (352days). It is calculated according to the days, i.e $7,950tCO_2 \times 352days / 366days = 7,646 tCO_2$. This calculation process is added as the footnote of 7,646 in table 30.

2. 8,400 in table 26 is $PE_{CH_4,y}$ for the whole year of 2020 for instance 2 (add footnote in table 25). While 8,079 in table 30 is $PE_{CH_4,y}$ for monitoring period of 15/01/2020-31/12/2020 (352days). $8,079tCO_2=8,400tCO_2*352days/366days$. This calculation process is added as the footnote of 8,079 in table 30.
3. 22,400 in table 25 is $PE_{CH_4,y}$ in the whole year of 2020 for instance 1 (add footnote in table 24). While 22,094 in table 29 is $PE_{CH_4,y}$ for period of 06/01/2020-31/12/2020 (361days). $22,094tCO_2=22,400 tCO_2*361days/366dyas$. This calculation process is added as the footnote of 22,094 in table 29.
4. 21,200 in table 27 is $PE_{N_2O,y}$ in the whole year of 2020 for instance 1 (add footnote in table 26). While 20,910 in table 29 is $PE_{N_2O,y}$ for period of 06/01/2020-31/12/2020 (361days). $20,910tCO_2=21,200 tCO_2*361days/366dyas$. This calculation process is added as the footnote of 20,910 in table 29.
5. 763 in table 24 is $PE_{EC,y}$ in the whole year of 2020 for instance 2 (add footnote in table 23). While 734 in table 30 is $PE_{EC,y}$ for period of 15/01/2020-31/12/2020 (352days). $734 tCO_2=763 CO_2*352days/366days$. This calculation process is added as the footnote of 734 in table 30.
6. 2,035 in table 23 is $PE_{EC,y}$ in the whole year of 2020 for instance 1 (add footnote in table 22). While 2,007 in table 29 is $PE_{EC,y}$ for period of 06/01/2020-31/12/2020 (361days). $2,007tCO_2=2,035 tCO_2*361days/366dyas$. This calculation process is added as the footnote of table 29.
7. 948,341 in table 22 is the round down value for $BE_{instance1,y}$ and $BE_{instance2,y}$. While 948,342 in the previous version of ER sheet was not round down. The ER sheet is revised, please find attached ER sheet.

The calculation for baseline emission and project emission is on a yearly basis according to the formula in the tools, but considering the start date for both instances in 2020 and end date of 1st crediting period in 2027, the actual operation days of both instances has been considered in ER calculation as explained above and footnote added in the updated PD. This calculation method is also added section 4.1 (above table 14) of the updated PD.

Hence, the final value of ER remains the same, because no change for the ER has been made, but more explanation has been included in the updated PD for easier understanding. And correction has been made in the updated ER sheet for average value of BE_y for consistency.

Related correction has been made in the updated FVR.

VERRA Response:

Verra has reviewed all the values and explanations against the ER spreadsheet. Verra is satisfied with the responses.

The finding is closed

Finding 7

In line with §3.4.3 of the VCS Program Standard v4.1, the project proponent shall use the VCS Monitoring Report Template or an approved combined monitoring report template available on the Verra website, as appropriate, and adhere to all instructional text within the template.

In completing Section 4.3: -

The PD states 'For this project, the compost is in aerobic condition, not subjected to anaerobic storage or disposed of in a SWDS. Therefore, $LE_{comp,y}$ is 0'. The PP shall explain how long the compost is stored before being sold, as considered in the FSR.

The VVB is required to explain how it verified that no compost (*refined organic fertilizer*) is stored (under anaerobic conditions)'

PP Response:

The compost is stored in aerobic condition and will be stored for no more than one month before they are sold. Because they are produced according to the order.

VVB Response:

By checking FSR, it is confirmed that the compost is stored in aerobic condition and will be stored for no more than one month before they are sold. Moreover, as the project has started operation, the same has been confirmed through site visit.

VERRA Response:

The PP and VVB have confirmed that the compost is stored in aerobic conditions
The finding is closed

2. MINOR FINDINGS

1. VCS PD Title Page: Include physical address, and website as applicable in line with the template

PP Response:

The physical address is added in title page of the PD.

Verra Response:

OK

3. ASSESSMENT CONCLUSION

On 20 April 2022, Verra completed the review of the Registration Review request for Project 2603, *Composting of organic waste project in Guangxi*, the results of which can be found above. The project review report was sent to *Guangxi Liyuanbao Science and Technology Co., Ltd.* and *LGAI Technological Center, S.A. (Applus+ Certification)*. with **07** assessment findings and **01** minor finding(s).

On 17 May 2022, Verra performed the review and closed all findings except finding 6.

On 14 June 2022, Verra performed the review and closed all findings except finding 6.

On 04 July 2022, Verra performed the review and closed all findings.